"Backward" Curiculum Design and Assessment: What Goes Around Comes Around, Or Haven't We Seen This Before?

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Introduction

A 'complete' curriculum planning model is not what the field needs. The field needs curriculum planners not only able to use various models but also aware of the implications of their use. (Posner, 1988, p. 94)

Traditional curriculum theory has developed out of an "instrumental rationality." This philosophical perspective separates means from ends to maximize efficiency and effectiveness. Tyler's (1949) rationale is an appropriate example of this approach. Tyler views curriculum theory as technical. Predetermined behavioral objectives serve as a driving force that controls the pedagogical and evaluative efforts that follow. Tyler asserts the development of objectives is necessarily the first "step" in curriculum planning "because they are the most critical criteria for guiding all the other activities of the curriculum maker" (1949, p. 62). This formulation happens before the curriculum maker can "carry on all the further steps of curriculum planning" (p. 62). Tyler's rationale has been challenged, but it seems to have become stronger as a result (Lagemann, 2000; Pinar, 1981). Indeed, its elegant simplicity is engaging.

Tyler's (1949) legendary rationale, a representative of "development" discourse over the last fifty years, has been utilized as a primary way to think about curriculum development and evaluation. However, at present, it tends to take a different form and employs different terminology. Recently, curriculum discourse as "development" tends to be replaced by what is called "backward" curriculum design and assessment (Wiggins & McTighe, 1998). This term has been widely circulated in professional discourse due mainly to its attractive premises and powerful promises. These promises fulfill imperative needs of stakeholders facing standards, assessment, and accountability measures resulting from the No Child Left behind Act of 2001 (NCLB). Conse-

quently, curriculum theory as "backward" has gained a new foothold in school and classroom practices across the country (McTighe & Thomas, 2003).

There is a close relationship between the concept "authentic" in the authentic assessment movement (popularized in the 1990s) and "backward" curriculum discourse. "Authentic" assessment elements are not only extensively included in "backward" curriculum design theory, their role and status are remarkably prioritized and escalated. The concept "authentic," namely a matter of the degree to which an assessment method is closely related to real life contexts, has been widely applauded by many scholars and practitioners. Tyler as well, though not employing the term "authentic assessment," advocated for behavioral objectives and accompanying "evaluations" that would identify "the content or area of life in which the behavior is to operate" (1949, p. 46). However, others note evidence that backward design encounters difficulties in dealing with issues of validity and reliability (Terwilliger, 1997). Under these circumstances, "backward" curriculum discourse has gained prominence throughout the 1990s and into the current century (Pinar & Irwin, 2005).

Despite this movement's popularity, the field of curriculum has paid little attention to this "backward" concept and its accompanying theoretical assumptions. This paper explores the latest manifestation of backward curriculum discourse, namely, a theory of "backward" unit design. We view this "backward" curriculum discourse as foundationally positivist and/or structural, yet we adopt a poststructural point of view. This theoretical undergirding makes it possible to rethink underlying, taken for granted assumptions. Our focus is on illuminating the potential problems of "structure-based," formulaic prescriptions of curriculum theory. The "backward" orientation clearly demonstrates a lack of understanding of curriculum history and ignores the complex roles of teachers and students in curriculum work. Additionally, "backward" curriculum discourse ignores emerging cultural perspectives now recognized in much postmodern discourse (Doll, 1993; Slattery, 1995).

Positivist approaches to curriculum theory, including both Tyler's prescriptions and the "backward" approach, are in contrast with postmodernist perspectives. Curriculum theory is "an integrated cluster of sets of analyses, interpretation, and understandings of curricular phenomena" (McCutcheon, 1982, p. 19). This cluster contains beliefs, commitments, values, and ideologies surrounding what and how to teach. Beginning in the 1970s, reflective theorizing efforts have emerged to open up a new postmodern world of curriculum discourse (Pinar & Reynolds, 1992; Pinar, Reynolds, Slattery, & Taubman, 1995, pp. 450-514). The value of curriculum theory as a distinct field of study lies in an ability to help curriculum workers identify a series of questions that should be addressed from multiple perspectives. Given this theoretical orientation, it is clear that one must be mindful of accepting any single dominating curriculum theory or model (Pinar, 2004).

Curriculum Planning Models: Then and Now

A myriad of curriculum planning models have come and gone over the last 80 years. Most, if not all, of them have certain stages in common. These numerous planning models are generally included in *traditional synoptic texts* (Reynolds, 2003, pp. 32-36; Rogan & Luckowski, 1990). While some *alternative synoptic texts* such as Schubert (1986) are descriptive in comprehensively addressing an inclusion of contemporary research and scholarship in the curriculum field (Rogan, 1991), most traditional synoptic ones are ones that prescribe "what and how to do" step-by-step to insure planners a quality curriculum product (for example, Doll, 1989; Ornstein & Hunkins, 1988; Wiles & Bondi, 1989). Posner (1988) reviewed models of curriculum planning in light of the two intellectual traditions: *the technical production* and the *critical* perspectives. Traditional synoptic texts fall into the former in that they attempt to answer "procedural" (Schwab, 1969; Taba, 1962), "descriptive" (Walker, 1971), or "conceptual" (Goodlad & Richter, 1977; Johnson, 1967) questions (Posner, 1988, pp. 81-89).

As Pinar, Reynolds, Slattery, and Taubman (1995) argued, these traditional synoptic texts are "atheoretical and ahistorical" (p. 12). The discourse is full of technical skills and procedures with no connection to the earlier epistemological question of what and whose knowledge is of most importance. Value-laden questions related to complex contextual situations have been largely missing. The planning logic underpinning these synoptic discourses is as follows: Once an end or a particular purpose is identified and thus legitimated, a series of effective and efficient means to assess/evaluate the degree of achievement of the purpose is technically adopted.¹

Clearly, there is a need to re-conceptualize the field of curriculum that has long overemphasized *development* discourse based upon a positivist position or instrumental rationality that separates means from ends. This ongoing need can be fulfilled when curriculum is understood "as discourse, or texts, and ... ideas" (Pinar, Reynolds, Slattery, & Taubman, 1995, p. 7). Freire's criticism of the "banking concept" of schooling in Posner's (1988) review of models of curriculum planning is an example of how curriculum as multiple texts can be re/examined in scholarly discourse. In short, Freire's ideological questions that attempt to undermine neutral positions are focused on developing the "critical consciousness" of the learners during the process of active dialogical engagement with their teachers regarding issues related to social justice in a larger world context (Posner, 1988, pp. 90-93).

With the emergence of the standards-based educational reform movement, the technical production perspective's impact on curriculum and institutional texts seems undoubtedly salient (Armstrong, 2002; Udelhofen, 2005). This is true especially when it is associated with issues of testing and accountability. As noted, this perspective favors a structural, or linear, approach to schooling. There is no question that the newly emerging "backward" curriculum discourse has swept the mainstream field of curriculum for this reason. The "backward" approach clearly aligns with the

NCLB requirements for standards and narrowly construed assessment of student proficiency related to these predetermined standards. Alternatively, since Posner's (1988) review, little discussion has occurred related to curriculum planning at advanced, critical levels. Our argument seeks to remedy this situation by raising unaddressed questions about backward curriculum discourse and approaches school curriculum in a different form.

A Poststructuralist Perspective

Structuralists apply structure-linguistic concepts to human science, analyzing and comparing phenomena in terms of parts and wholes and defining structures as the interrelation of parts within a common system. Poststructuralists emphasize, "in a far more radical way, the arbitrary, differential, and non-referential character of the system" (Best & Kellner, 1991, pp. 18-20; Dickens & Fontana, 1994; Sarup, 1993). In other words, structuralism has sought to identify "a system" that creates meaning, while poststructuralism has sought to repudiate, dismantle, deconstruct, and reveal the variance and contingency of "the system." In this respect, we assert that poststructuralism rejects structuralism in terms of "a scientific basis for the study of culture and the standard modern goals of foundation, truth, objectivity, certainty, and system" (Best & Kellner, 1991, p. 20).

As a major analytic tool of poststructuralism, *deconstruction* was first used in 1967 by Derrida who argued, "[deconstruction] is a question of explicitly and systematically posing the problem of the status of a discourse" (Derrida, 1978, p. 282). Specifically, deconstruction is aimed at showing in what way a meaning within a systematic or binary structure is unstably inscribed and thus how the meaning under investigation is endlessly evolving. Poststructuralists do not impose or privilege one reading over another (Dickens & Fontana, 1994; Jencks, 1989; Norris, 1987, 1989; Norris & Benjamin, 1988; Rousenau, 1992; Yeaman, 1994). The relationship between human beings, the world, and the practice of making and reproducing meanings becomes more explicit than it used to be. The aim is to prompt the uncertainty of questions, as opposed to delivering the finality of answers.

Poststructuralism provides opportunities for reflection on languages, discourse and the world in which we live (Belsey, 2002, p. 107; Reynolds & Martusewicz, 1994). In relation to the present paper, the poststructural perspective helps us rethink widely circulated educational discourse that tends to be taken for granted. More specifically, the direction-based language, "backward design," as a linear prescription, has apparently been regarded as a cure all treatment for improving or changing educational practice and outcomes. By questioning fundamental assumptions embedded in this language, one can grab a better sense of what it actually means in conjunction with the contemporary educational change policy. In this regard, the poststructural perspective contributes to directing us to identify the system of "backward" curriculum and assessment theory; deconstruct the assumptions that are taken for

granted in the context of assessment-driven classroom change; and regain an image of what is indeed needed for teachers in making a meaningful difference in lives of students living in a complex world.

The Structural Nature of "Backward" Curriculum Discourse

We now turn to situating "backward" curriculum discourse in the context of curriculum history and introduce its basic ideas and structures. We then continue our deconstruction by examining Wiggins and McTighe's (1998; also see for more information, Wiggins & McTighe, 2000a, 2000b, 2004 or McTighe & Wiggins, 1999, 2004) attempts to "understand understanding" and then detail the key role and function of assessment underpinning this "backward" discourse.

Basic Ideas and Structure

"Backward" curriculum discourse involves two overlapping theoretical assumptions. First, when developing curriculum at the classroom level and beyond, curriculum workers begin by identifying types of outcomes students can achieve as a result of instructional efforts. Second, and more importantly, evaluation or assessment is placed in-between the identification of educational aims and the development of specific content or learning experience. We assert that these theoretical assumptions are merely recycled versions of earlier positivist proposals. Tyler's (1949) widely circulated view of curriculum development is a prime example. Tyler's (1949) rationale is compared to Wiggins and McTighe's (1998) backward unit design development and assessment model in Table 1.2 The parallels are remarkable. Both Tyler and Wiggins and McTighe begin with predetermined outcomes. For Tyler these are "educational purposes" we should "seek to attain." The label applied at the time was behavioral objectives. Wiggins and McTighe apply the current jargon "standards" as the "desired results." Additionally, and again advocating for the same procedure using different terminology, Tyler (1949, pp. 104-113) discusses "evaluation," Wiggins and McTighe "assessment," "performance tasks," and other "acceptable evidence" for evaluative purposes (1998, pp. 9-13). In Tyler's syllabus, he presents his evaluation discussion as the last of four questions, but he clearly sees this (developing evaluation procedures) as directly linked to objective identification. He asserts, "It is only after the objectives have been identified, clearly defined, and situations listed which give opportunity for the expression of the behavior desired that it is possible to examine available evaluation instruments" (1949, p. 113). Wiggins and McTighe's linear model differs slightly in that it goes directly from "desired results" to "determine acceptable evidence."

Tyler and Wiggins and McTighe do address the planning of experiences for students designed to promote the learning necessary to succeed on the predetermined evaluations/assessments, but this attention to teaching aspects, both content

Table 1. A Comparison of Tyler's Rationale to Wiggins and McTighe's Design Stages

Tyler's (1949) Four Fundamental Questions	Wiggins and McTighe's (1998) Stages in the Design Process
1. What educational purposes should the school seek to attain?	1. Identify desired results
2. What educational experiences can be provided that are likely to attain these purposes?	
3. How can these educational experiences be effectively organized?	
4. How can we determine whether these purposes are being attained?	2. Determine acceptable evidence
	3. Plan learning experiences and instruction

and pedagogical aspects, seems to take a back seat. For Tyler, this curricular focus is framed in two questions: "What educational experiences can be provided that are likely to attain these purposes?" and, "how can these educational experiences be effectively organized?" (1949, p. 1). For Wiggins and McTighe, their last "stage" in the "backward design process" is to "plan learning experiences and instruction" (1998, p. 9).

Understanding Understanding

The "backward" design model relates to the general criticism of schooling, which asserts that students leave school without a solid knowledge base. In contrast to the conventional curriculum design that is "hands on without being minds on," Wiggins and McTighe (1998) assert the following "uncoverage" nature of their backward approach:

A curriculum designed to develop understanding would uncover complex, abstract, and counterintuitive ideas by involving students in active questioning, practice trying out ideas, and rethinking what they thought they knew. 'Uncoverage' describe the design philosophy of guided inquiry into more abstract ideas, to make those ideas more accessible, connected, meaningful, and useful. (p. 21)

The concept of "uncoverage" in the Wiggins and McTighe design scheme refers to the way in which important ideas worthy of understanding are prioritized. Wiggins and McTighe (1998) suggest four criteria for determining material worthy not just of covering but of understanding:

◆ Enduring (Representing a big idea having enduring value beyond the classroom)

- ◆ *Heart of the discipline* (involving "doing" the subject)
- Needing uncoverage (requires uncoverage of abstract or often misunderstood ideas)
- ◆ Potentially engaging (offers potential for engaging students). (p. 23)

Curriculum theory as "backward" values the identification of a big idea that consists of the major structure of knowledge in a subject area. A big idea as enduring refers to the important understanding that "we want students to 'get inside of' and retain after they've forgotten many of the details" (Wiggins & McTighe, 1998, p. 10). In this regard, *understanding* is one that clearly involves both comprehensiveness and depth. McTighe and Thomas (2003) note:

Students' understanding of the key ideas embedded in the content standards, then, should be the focus of any school improvement initiative. While seeking answers to important questions, students learn specific facts, concepts, and skills-those that typically appear on standardized tests-in the context of exploring and applying the larger ideas. (p. 52)

Classroom teachers as "backward" curriculum designers, therefore, should lend themselves to inquiring into the ways *understanding* is thoroughly unearthed in each subject area. In the way that a big idea is selected and meaningfully constructed, "backward" curriculum theory requires that classroom teachers be aware of the potential for student engagement as part of their design consideration.

Assessment

The hallmark of "backward" curriculum theory is its great emphasis on assessment. Since 1989, when National Council of Teachers of Mathematics (NCTM) first published content and performance standards, the focus on how to assess student learning has increased tremendously. In this "backward" curriculum planning model, the entity of assessment obtains high status in which teachers' are seen as "assessors," as opposed to "developers." Wiggins and McTighe (1998) argue:

To think like an assessor prior to designing lessons-what backward design demands-does not come naturally or easily to many teachers. We are far more used to thinking like an activity designer once we have a target. That is to say, we easily and unconsciously jump to Stage 3 of design, the design of lessons, without asking ourselves whether we have the necessary evidence to assess for the core knowledge and are aiming for it. (p. 65)

For the advocates of curriculum theory as "backward," the definition of curriculum is more likely to parallel prescribed standards or what Glatthorn and his associates (1998) call, the recommendation curriculum, which "derives from experts in the field." Almost every discipline-based professional group has promulgated curriculum standards for its field, for example, Kendall and Marzano's produced a comprehensive report, Content knowledge: A compendium of standards and

benchmarks for K-12 education (1996) (2003, September, http://www.ascd.org/handbook/demo/planning2.html). Importantly, these recommended curricula have played a powerful role in leading professionals in education to believe that standards should "provide a framework to help us identity teaching and learning priorities and guide our design of curriculum and assessment" (Wiggins & McTighe, 1998, pp. 7-8). In short, standards are useless without the support of assessment and, in turn, assessment is empty without the guide of standards.

Specifically speaking, standards are used to single out types of understanding as "targeted outcomes" in a subject area. Wiggins and McTighe (1998) note at least six facets of understanding including: explanation, interpretation, application, perspective, empathy, and self-knowledge. Clearly, what makes "backward" curriculum theory popular is its emphasis on the system of assessment aimed at identifying the value for a measure of a diverse human understanding. It is not surprising to encounter discourse in the contemporary literature in which curriculum, instruction, and assessment are used as synonymous (Darling-Hammond, 1994; Enger & Yager, 2001; Germinario & Cram, 1998). However, the essence of "backward" curriculum text tends to involve multiple assessment methods of student learning and instructional improvement toward exploring the concept of understanding, as opposed to a matter of right versus wrong (Wiggins & McTighe, 1998, p. 70). Assessment tools, aligned with "big ideas" often derived from prescribed standards, should be constructed before considering questions of how to teach. Toward this end, major tasks of "backward" designers in the second stage, entitled Determine Acceptable Evidence, involve completing sets of assessment methods such as (a) Performance tasks or projects, (b) quizzes, tests, academic prompts, (c) informal observations/discussions, and (d) student self-assessment.

Discussion

Meanings are dispersed and deferred in time. (Cherryholmes, 1988)

Not enough is known about the deep impacts of the newly emerging "backward" curriculum discourse on the field of curriculum (Pinar & Irwin, 2005, pp. 39, 239). This lack is mainly because Wiggins and McTighe (1998), whose academic backgrounds are in measurement/evaluation, initiated "backward" curriculum discourse. This term, therefore, seems to be relatively new to those in the field of curriculum at large. One trend seems clear—the language of "backward" has become more and more pervasive at all educational levels (K-16). This is especially true with K-12 educators.

Due to "backward" design's functional ability to unpack a set of content and performance standards in an efficient way, its popularity is growing. Proponents assert "backward" curriculum theory consists of a robust structure wherein standards, assessment, and instructional activities are streamlined in a logical or "forward" way (McTighe & Thomas, 2003). This development draws a new image of the teacher as an *assessor* who should put more emphasis in determining what and

how to assess students' learning progress in terms of predetermined goals or standards coupled with predetermined assessment methods (Pinar, 2004, pp. 226-232).

In what follows, we present three grand narratives of "backward" discourse and critically discuss the myth of such grand narratives in terms of the problem of instrumental rationality, the hidden pitfall of teachers' overemphasized role on assessment, and a lack of cultural sensitivity.

"Backward" Curriculum and Assessment Theory as Grand Narrative

"Backward" curriculum and assessment theory involves three grand narratives surrounding the role of curriculum design, the meaning of authentic learning, and the possibility of teacher change.

First, "backward" curriculum discourse is viewed as universal, aimed at guaranteeing infrastructural support. There is evidence that content standards and textbooks do not always explicitly highlight the key concepts behind the content. Whether this approach to the broad nature of standards is appropriate is still controversial, but many educators insist that standards should be stated broadly, so that teachers can deliberatively choose instructional methods for their classrooms (Kendall & Marzano, 1996). Therefore, many teachers are now convinced that the best way to unpack the standards, or uncover the key ideas within the content, is to begin their job with identifying desired outcomes. "Backward" curriculum theory is seen therefore as infrastructural in nature, because of the effective and efficient connection of standards to instructional goals and objectives.

Second, a theory of assessment-driven learning is highlighted. In this curriculum and assessment theory as "backward," the meaning of learning is dependent only on assessment. In a sense, teaching and learning are conceived of as one entity in the setting of everyday assessment in classroom life. The fact that students' learning progresses and the degree to which they make sense of key concepts and skills are assessed over time in multiple ways is both educative and desirable. Following this logic, advocates of "backward" curriculum theory claim that learning is not something that is theory driven, but is more likely to be a simultaneous, directive review process between what is taught and what is tested.

Third, curriculum theory as "backward" is manifested as an emerging teacher change theory. Advocates of this theory are aware of the critical challenge of inservice and pre-service teacher education to change teacher habits or rationalizations in a fundamental way. Interestingly, the way "backward" curriculum text comes to this matter of teacher change appears to give little guidance to teachers related to what they should do to enhance their understanding of students; the ways people learn; and the relationships between teachers, their students, students' families, and the broader community. Instead, Plato's classic story of the cave is used as a guiding metaphor to see if the teacher him/herself has been only looking in one direction at

shadows cast by moving objects. In effect, teachers are asked to reflect on whether they are in danger of misunderstanding what students need to understand (Wiggins & McTighe, 1998, pp. 174-175).

De-centering "Understanding by Design"

The underlying core concept of "backward" curriculum theory, from a poststructural perspective, is "purposeful task analysis" (Wiggins & McTighe, 1998, p. 8). Indeed, task analysis, typical in positivist discourse, means "the process of breaking down a topic or skills into its prerequisite skills or parts" (Kauchak & Eggen, 2003, p. 96). It is believed that purposeful task analysis makes it possible to bring to light students' understanding. In other words, as in the field of architecture, a matter of design in "backward" curriculum discourse has high status. The structural or positivist assumption that students' deeper understanding can be achieved by design, or purposeful task analysis, requires explication.

Separating Means from Ends

The fixed, linear, simple structure of purposeful task analysis/backward design is what structuralism values: order, organization, rationality, and control for maintaining the status quo of discourse-practice. From a Foucauldian perspective, the following analysis is indicative of the problem of how "backward" curriculum theory is accepted without question. Cherryholmes (1988) asserts:

Curricula and instructional plans constructed on ... [Tyler's] pattern necessarily reflect the dominant ideology and power arrangements of the time ... The structural basis for the Tyler rationale produces programs that are unwitting captives of their times. They are objects of history intentionally produced by educational experts. (pp. 40-41)

A "backward" curriculum model begins its discourse with "the end—the desired results (goals or standards)" (Wiggins & McTighe, 1998, p. 8). This corresponds nicely with the national emphasis (i.e. NCLB) on the same. As shown above, the main assumptions underpinning "backward" curriculum theory trace back to Tyler's (1949) behavioral objective model. The title of the seminal backward design book, *Understanding by Design* (1998), implies that understanding can be achieved by a matter of design, which is supported by the authors of the book who note "we use curriculum as a means to an end" (Wiggins & McTighe, p. 8). This is akin to what Tyler referred to as "an instructional program as a functioning instrument of education" (Wiggins & McTighe, 1998, p. 1). The new professional need for effectively enacting standards in practice results in a rigid, linear model, moving "backward" or "forward," or both, which forces classroom teachers to engage in the similar functional job they previously pursued under the name of Tyler's rationale. In sum, curriculum theory as "backward" is a revival of instrumental rationality. It is, therefore, an object of history, intentionally produced/reproduced by those in measurement/evaluation.

Assessment/Power

Since the early 1990s, the term assessment, which means to sit by as an assistant judge in Latin, has been regarded as the most important language in the standards-based education movement. Traditionally, the concept of assessment referred to collecting and interpreting information to guide classroom decision-making, but nowadays, it appears to encompass the concept of evaluation referred to as the process of making judgments about the quality or goodness of a performance or a course of action. This shifts emphasis from formative to summative methods. This is due in large part to the fact that the language of assessment has been used dominantly in most official documents at the federal and state levels, not to mention textbooks and journal articles published in scholarly and professional communities. The traditional meaning of assessment functioned as a means to an end—namely, putting great efforts into collecting data prior to making a final decision. The emphasis has now shifted to the judgmental role of evaluation.

Currently, it is not difficult to encounter assessment and evaluation used interchangeably. Yet, there are some important effects of using these interchangeable terms on the politics of teachers' curriculum work, which "backward" curriculum theorists overlook, both explicitly and implicitly. On the surface, the mixed use of the terms seems to be so natural that teachers' role and work in the matter of curriculum are likely to become more sophisticated than before. That is, everything that teachers do inside and out of the classrooms, to some extent, involves transforming a useful process of collecting and analyzing data into teachers' judgmental or evaluative acts over the lives of students. On the other hand, however, it is likely that teachers find themselves playing a very limited role in unfolding curriculum in the classrooms, particularly when living under pressure of external requirements. Put differently, teachers slide into a structure in which they actually control student behavior in terms of predetermined, specific evaluative criteria.

From a Foucauldian perspective, teachers' explicit judgment-based assessment efforts of this kind involve "disciplinary power [that] became an integrated system, linked from the inside ... to the aims of the mechanism in which it was practiced" (Rabinow, 1984, p. 192). The supreme role of assessment in a backward unit design development process is more likely to be convergent with making predetermined goals a reality at the expense of being divergent with making contextually appropriate curriculum decisions. A number of assessment methods targeted for predetermined goals are believed to work best when students do exactly what they are supposed to do, either in a group or individually. Hence, it is likely that disciplinary power is implicitly deployed once teachers find themselves as assessors, inclusive of an image of teachers as micro-judgmental supervisors.

Such disciplinary power comes to be explicitly deployed in everyday classroom contexts. Students may feel that their teachers are always evaluating their thoughts and behaviors. In this setting, students may have little room for critically examining

a *why* question, since they are "constantly supervised" (Rabinow, 1984, p. 192) in terms of predetermined, goals-based, and extremely detailed assessment criteria. Assessment-driven planning and implementation incorporating behavioral classroom management techniques such as order, discipline, and control are similarly manifested in "backward" curriculum texts.

Therefore, assessment/power derives from a purely deductive logic of backward curriculum design. Because knowledge can be technically classified based upon a degree of understanding and/or difficulty, all teachers can do is build a variety of assessment instruments to determine whether codified knowledge and skills are effectively embodied in their students. Like the technology of a panopticon, the effect of such an assessment/power system, Foucault asserts, is deployed in an effort to constantly observe and measure student behavior inside and out of the classroom toward disciplining student bodies and thus making them gradually docile (Rabinow, 1984, pp. 179-187).

Why such an assessment/power system advocated in "backward" curriculum discourse might have an impact on student behavior is located, in part, in the problematic nature of what a "unit" should be, and more importantly, how the unit's essential questions should be developed, and in terms of what criteria. Taken together, the ultimate educational aim set forth in this "backward" discourse is to help students make sense of a big idea that is defined as the "key inquiries and the core ideas of a discipline" (Wiggins & McTighe, 1998, p. 28). Ironically, advocates of "backward" curriculum discourse suggest that the nature of a unit's theme and its essential guiding questions from these vague content standards converge with the assumption underpinning the structure of a discipline proposed by Jerome Bruner about 40 years ago (Wiggins & McTighe, 1998, p. 11, pp. 64-65). That is, a unit's themes or basic ideas must be fundamental in a discipline. In fact, these advocates state that the big idea of a unit should come out of content standards that have been seen as vague in nature (Kendell & Marzano, 2000). The gap between the given vague content standards and the structural approach to disciplines is unlikely to be filled by a more structural, sequential, and linear method of task analysis. In effect, teachers' curriculum work is largely preoccupied with a technical assessment system in which individual students, or students as a group, are forced to perform "segments" of what they have learned without consideration of students' individuality or contexts.

In this sense, "backward" curriculum design theory is more likely to be the same as an "assessment model," in which the politics of those in areas of measurement and psychometrics are prioritized and thus legitimated. "Backward" curriculum/assessment discourse criticizes traditional paper-pencil tests, including standardized tests, but embraces its necessity within a large spectrum of assessment that produces yet another dogmatic power. Consequently, a variety of assessment methods listed in the "backward" design template appear to be a set of ritual performances for teachers whose major image is framed as assessors. This role is that of the technicians who technically insert the myriad forms of assessment in their unit design templates so

that they are directly "aligned" with the predetermined outcomes. It is not clear that the teachers as assessors can make all of assessments meaningful during the teaching and learning process. Students as human beings are naturally vulnerable to being exposed to technology of assessment/power exercised, even if implicitly, by teachers as evaluators. When assessment becomes a major driving force in implementing the curriculum, classroom practice may fall short of a dynamic, meaning making process that occurs between teacher and students.

A Lack of Concern with Socio-cultural Classroom Dynamics

Teaching and learning occur in a very complex environment. There is evidence that teachers are experiencing more difficulty than ever before in developing a curriculum that honors students from various socio-cultural backgrounds. Research suggests that one cannot expect meaningful classroom learning outcomes without taking into account the increasing complexity of classroom learning environments and students' characteristics and experiences (Farr & Trumbull, 1997). Context-sensitive explanations of how students learn differently are emerging in disciplines such as anthropology, sociology, cultural studies, as well as in education. The key concern of this research involves questioning the legitimate status of knowledge that has been transmitted in a school curriculum that is officially delivered in the form of value-free goals or objectives. Some argue that all knowledge is subjective in nature and politically constructed, since selecting one educational goal or objective over another one may provide advantage for some and, at the same time, disadvantage for others (Kliebard, 1975).

The discussion of teachers' value-laden curriculum activity is missing in this "backward" curriculum discourse. Also missing is a question of what and whose knowledge is of most importance. Instead, prescribing to teachers "what and how to do" is clearly manifested in the context of normalized classrooms. With an implementation strategy in mind, advocates of this "backward" discourse prescribe a linear sequence for ensuring high quality curricula units that are summarized in the acronym WHERE³: (1) Where are we headed, (2) Hook the student through engaging and provocative entry points, (3) Explore and enable/equip, (4) Reflect and rethink, and (5) Exhibit and evaluate (Wiggins & McTighe, 1998, pp. 117-128). Exclusive of political, social and cultural contexts, the major curricular and instructional concerns of this "backward" discourse emphasize the teacher's effectiveness as measured by student success on the formulated assessments more than the teacher's ability to connect knowledge and skills to various student interests and needs.

The second stage of WHERE, entitled "Hook the student through engaging and provocative entry points," makes the case. Treating the student as a passive knowledge consumer, this "backward" discourse suggests skills that are technically used to gain immediate attention of students. Telling a mysterious story is exemplified as one element of hooking students in this discourse. However, without considering

those who have diverse socio-cultural backgrounds, interests, and experiences, this kind of a one-sided convergent approach to teaching may produce questions that will need to be addressed. Questions that teachers in diverse classroom environments should keep in mind, but those of a "backward" mentality try to avoid. Emergent and/or culturally responsive curriculum finds no room in this model.

In the era of multicultural society, classroom teachers should be aware of the fact that "misperceptions about the relationships ... between conversational skill and academic language skill have often led to inappropriate instruction" (Farr & Trumbull, 1997, p. 127). Simply put, at the center of the "backward" discourse is a language of effectiveness that intentionally excludes many aspects of value-laden questions underpinning current issues of cultural and linguistic diversity. Hence, given the fact that a complexity of socio-cultural classroom contexts is missing, "backward" discourse must clearly be viewed as a revival of conventional, positivistic curriculum discourse. Such a philosophical and theoretical undergirding has failed to take into account lives of students who are marginalized, in schools. If the nation is to truly implement the national/political goal of "No Child Left Behind" there must be an alternative base for curriculum implementation.

Conclusion

The current national reform initiative has attempted to minimize multiple, constructive, and cultural ways of student knowing. The national reform policy, i.e., No Child Left Behind, has been pushing local educators through accountability. Under this circumstance, "backward" curriculum theory has emerged with an ambitious agenda, asserting students' deeper understanding in subject areas can be achieved by means of *design*.

As it turns out, curriculum theory as "backward" lacks a utilization of the historical knowledge base. Justifying the term "backward" against the term "forward" is arbitrary, since teaching and learning activities in the classroom are unlikely to proceed in certain predetermined directions. Moving "backward" to identify what is actually desired to better meet the current accountability demands in education is in itself neither a necessary nor a sufficient condition. Put differently, the scope of who should be held accountable for the learning of all the students in the nation needs to be widened to the extent to which to include the responsibilities of all the stakeholders such as students, teachers, school administrators, parents, and policymakers (Linn, 2003, p. 3; Pinar, 2004, pp. 222-226). Consequently, direction-based, "backward," discourse in the educational enterprise is simply an instrumental path to fulfilling a narrowed vision of what education looks like. The ends should continue to be aligned in harmony with the means. Putting a heavy emphasis on the entity of assessment as a means cannot be a cure all answer in approaching the ongoing, recurring problems and issues of educational practice.

Furthermore, thinking of teachers as "assessors" in the classroom falls short of

a culturally responsive pedagogy as a necessary part of teachers' roles (Smith, 1998, pp. 52-59). In the long run, "backward" curriculum discourse as institutional text is "designed" to play a key gatekeeper's role in centering state/district standards to dictate interactions between teacher and student. This is largely because of its overemphasis on task analysis that devalues the unique life experience of the individual. More theoretical and practical analysis is needed. What is urgently needed is a reconceptualization of the relationship between curriculum and evaluation or assessment. Educators and educational policy makers at national, state and local levels must begin to build on these alternatives that respect teachers' knowledge and students' diversity and experiences.

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Notes

¹Not all examples illustrated in Posner's text fall into this approach. Initially, we authors believe that Posner's juxtaposed framework falls short of the meaningful classification of a variety of models of curriculum planning, all of which might be better understood on the continuum. For instance, Posner misinterpreted Schwab's deliberative approach and thus placed it under the technical production perspective. Clearly, Schwab's work falls into the middle of his juxtaposition, one that might be classified as another perspective.

 2 Posner (1988, p. 89) compared Johnson's (1967) elements, Tyler's (1949) questions, and Taba's (1962) steps to one another in terms of analyses of curriculum and curriculum development. As it turned out, Posner concluded that along with Walker (1971), Schwab (1969), and Goodlad and Richter (1977), "although dissent is found among these works regarding specific aspects of the technical productive perspective, they share many assumptions."

³ In the section, Misconception Alert, Wiggins and McTighe (1998, p. 116) note, "we stress here that WHERE, like the facets, serves more as a criterion for design than as a chronology or step-by-step recipe. Recall that Bloom's Taxonomy of Educational Objectives (1956) represents a way of judging assessment items and tasks for cognitive difficulty and is not a rigid prescribed sequence for teaching. Similarly, WHERE represents a way of testing lessons and units rather than a recipe for building them."

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